

2 Early Greek Philosophy: The Emancipation of Thought from Myth

In the sixth century B.C., Greeks living in the city of Miletus in Ionia, the coast of Asia Minor, conceived a nonmythical way of viewing nature, a feat that marks the origins of philosophic and scientific thought. Traditionally, natural occurrences like earthquakes and lightning had been attributed to the gods. But early Greek thinkers, called cosmologists because they were interested in the nature and structure of the universe, were the first to see nature as a system governed by laws that the intellect could ascertain. The cosmologists sought physical rather than supernatural explanations for natural events. This new approach made possible a self-conscious and systematic investigation of nature and a critical appraisal of proposed theories; in contrast, the mythical view that the gods regulate nature did not invite discussion and questioning.

Aristotle THALES OF MILETUS

Thales of Miletus (c. 624–c. 548 B.C.) is considered the founder of Ionian philosophy. He wanted to know how nature came to be the way it is, and he did not turn to traditional legends for an answer. Thales said that water was the basic element of nature and that through a natural process—similar to the formation of ice or steam—water gave rise to everything else in the universe. Thales revolutionized thought because in searching for a first cause in nature he omitted the gods. What we know about Thales' view of nature comes essentially from Aristotle (see page 89). A brief reference to Thales from Aristotle's *Metaphysics* follows.

Most of the philosophers thought that principles in the form of matter were the only principles of all things: for the original source of all existing things, that from which a thing first comes-into-being and into which it is finally destroyed, the substance persisting but changing in its qualities, this they declare is the element and first principle of existing things . . . for there must be some natural substance, either one or more than one, from which the other things come-into-being, while it is preserved. Over the number, however, and the

form of this kind of principle they do not all agree; but Thales, the founder of this type of philosophy, says that it is water (and therefore declared that the earth is on water), perhaps taking this supposition from seeing the nurture of all things to be moist, and the warm itself coming-to-be from this and living by this (that from which they come-to-be being the principle of all things)—taking the supposition both from this and from the seeds of all things having a moist nature, water being the natural principle of moist things.

ANAXIMANDER

Anaximander (c. 611–547 B.C.), another Ionian, also held that a single element was the wellspring of nature, but he rejected any specific substance such as water, holding instead that something indefinite, which he called the Boundless or the Infinite, was the source of all things. Anaximander attempted to explain how natural objects and living things had derived from this primary mass. What is remarkable about Anaximander's cosmogony was the omission of the gods or any supernatural agency in the origin of life and the formation of the world. All that we know about Anaximander comes from brief passages in the writings of several ancient scholars.

Of those who say that it is one, moving, and infinite, Anaximander, son of Praxiades, a Milesian, the successor and pupil of Thales, said that the principle and element of existing things was the *apeiron* (indefinite, or infinite), being the first to introduce this name of the material principle. He says that it is neither water nor any other of the so-called elements, but some other *apeiron* nature, from which come into being all the heavens and the worlds in them.

For he (Anaximander) thought that things were born not from one substance, as Thales thought from water, but each from its own particular principles. These principles of individual things he believed to be infinite, and to give birth to innumerable worlds and whatsoever arises in them; and those worlds, he thought, are now dissolved, now born again, according to the age to which each is able to survive.

He says that that which is productive from the eternal of hot and cold was separated off at the coming-to-be of this world, and that a kind of sphere of flame from this was formed round the air surrounding the earth, like bark round a tree. When this was broken off and shut off in certain circles, the sun and the moon and the stars were formed. . . .

The heavenly bodies come into being as a circle of fire separated off from the fire in the world, and enclosed by air. There are breathing-holes, certain pipe-like passages, at which the heavenly bodies show themselves; accordingly eclipses occur when the breathing-holes are blocked up. The moon is seen now waxing, now waning according to the blocking or opening of the channels. The circle of the sun is 27 times the size of (the earth, that of) the moon (18 times); the sun is highest, and the circles of the fixed stars are lowest. . . .

Winds occur when the finest vapours of the air are separated off and when they are set in motion by congregation; rain occurs from the exhalation that issues upwards from the things beneath the sun, and lightning whenever wind breaks out and cleaves the clouds. . . .

(On thunder, lightning, thunderbolts, whirlwinds and typhoons.) Anaximander says that all these things occur as a result of wind: for whenever it is shut up in a thick cloud and then bursts out forcibly, through its fineness and lightness, then the bursting makes the noise, while the rift against the blackness of the cloud makes the flash. . . .

Anaximander said that the first living creatures were born in moisture, enclosed in thorny barks; and that as their age increased

they came forth on to the drier part and, when the bark had broken off, they lived a different kind of life for a short time.

Further he says that in the beginning man was born from creatures of a different kind; because other creatures are soon self-supporting, but man alone needs prolonged nursing. For this reason he would not have survived if this had been his original form.

Anaximander of Miletus conceived that there arose from heated water and earth either fish or creatures very like fish; in these man

grew, in the form of embryos retained within until puberty; then at last the fish-like creatures burst and men and women who were already able to nourish themselves stepped forth.

Living creatures came into being from moisture evaporated by the sun. Man was originally similar to another creature—that is, to a fish.

[H]e declares . . . that originally men came into being inside fishes, and that having been nurtured there—like sharks—and having become adequate to look after themselves, they then came forth and took to the land.

Aristotle PYTHAGORAS

Pythagoras (c. 580–507 B.C.) was born on the island of Samos, a major Greek cultural and commercial center in the eastern Aegean Sea; as a young man, he migrated to southern Italy, where the Greeks had established colonies. A deep religiosity pervaded the thought of Pythagoras and his followers, who sought to purify the soul and to achieve salvation. Believing that the soul undergoes a reincarnation in animals, Pythagoreans would not eat meat. The Pythagoreans' great contribution to scientific thought was their conviction that nature contains an inherent mathematical order. Thus, continuity exists between the Pythagoreans and Isaac Newton and Albert Einstein, who expressed the laws underlying the cosmos in mathematical terms more than two thousand years later. Aristotle's description of the Pythagoreans follows.

. . . the Pythagoreans, as they are called, devoted themselves to mathematics; they were the first to advance this study, and having been brought up in it they thought its principles were the principles of all things. Since of these principles numbers are by nature the first, and in numbers they seemed to see many resemblances to the things that exist and come into being—more than in fire and earth and water (such and such a modification of numbers being justice, another being soul and reason, another being opportunity—and similarly almost all other things being numerically expressible);

since, again, they saw that the attributes and the ratios of the musical scales were expressible in numbers; since, then, all other things seemed in their whole nature to be modelled after numbers, and numbers seemed to be the first things in the whole of nature, they supposed the elements of numbers to be the elements of all things, and the whole heaven to be a musical scale and a number. And all the properties of numbers and scales which they could show to agree with the attributes and parts and the whole arrangement of the heavens, they collected and fitted into their scheme.

REVIEW QUESTIONS

1. Why is Thales considered the first philosopher in the Western world?
2. Compare the Babylonian and Hebrew accounts of the origin of the world and human beings with that of Anaximander. How do they differ in purpose and literary genre?
3. What is the significance of Pythagoras' view that nature contains an inherent mathematical order?
4. Early Greek philosophy marks a break with mythical thinking and the emergence of rational scientific thinking. Discuss this statement.

3 The Expansion of Reason

The new method of inquiry initiated by the Ionian natural philosophers found expression in other areas of Greek culture. Thus, in the Greek medical school headed by Hippocrates (c. 460–377 B.C.) on the island of Cos, doctors consciously attacked magical practices and beliefs, seeing them as hindrances to understanding causes and cures of disease. The historian Thucydides (c. 460–400 B.C.) sought logical explanations for human events, and the Sophists applied reason to traditional religion, law, and morality.

Hippocrates

THE SACRED DISEASE

THE SEPARATION OF MEDICINE FROM MYTH

In the following excerpt from “The Sacred Disease,” a Hippocratic doctor rejects the belief that epilepsy is a sacred disease. Instead he maintains that epilepsy, like all other diseases, has a natural explanation and denounces as “charlatans and quacks” those who claim that gods cause the disease.

I. I am about to discuss the disease called “sacred.” It is not, in my opinion, any more divine or more sacred than other diseases, but has a natural cause, and its supposed divine origin is due to men’s inexperience, and to their wonder at its peculiar character. Now while men continue to believe in its divine origin because they are at a loss to understand it, they really disprove its divinity by the facile method of healing which they adopt, consisting as it does of purifications and incantations. But if it is to be considered divine just because it is wonder-

ful, there will be not one sacred disease but many, for I will show that other diseases are no less wonderful and portentous, and yet nobody considers them sacred. For instance, quotidian fevers, tertians and quartans seem to me to be no less sacred and god-sent than this disease,* but nobody wonders at them. . . .

*Because of the regularity of the attacks of fever, which occur every day (quotidians), every other day (tertians), or with intermission of two whole days (quartans).

II. My own view is that those who first attributed a sacred character to this malady were like the magicians, purifiers, charlatans and quacks of our own day, men who claim great piety and superior knowledge. Being at a loss, and having no treatment which would help, they concealed and sheltered themselves behind superstition, and called this illness sacred, in order that their utter ignorance might not be manifest. They added a plausible story, and established a method of treatment that secured their own position. They used purifications and incantations; they forbade the use of baths, and of many foods that are unsuitable for sick folk. . . .

But if to eat or apply these things engenders and increases the disease, while to refrain works a cure, then neither is godhead to blame nor are the purifications beneficial; it is the

foods that cure or hurt, and the power of godhead disappears.

III. Accordingly I hold that those who attempt in this manner to cure these diseases cannot consider them either sacred or divine; for when they are removed by such purifications and by such treatment as this, there is nothing to prevent the production of attacks in men by devices that are similar. If so, something human is to blame, and not godhead. He who by purifications and magic can take away such an affliction can also by similar means bring it on, so that by this argument the action of godhead is disproved. By these sayings and devices they claim superior knowledge, and deceive men by prescribing for them purifications and cleansings, most of their talk turning on the intervention of gods and spirits.

Thucydides

METHOD OF HISTORICAL INQUIRY

Thucydides' history was another expression of the movement from myth to reason that pervaded every aspect of Greek culture. Mesopotamians and Egyptians kept annals purporting to narrate the deeds of gods and their human agents. The Greeks carefully investigated events—the first people to examine the past with a critical eye. Thucydides examined men's actions and their motives, explicitly rejected divine explanations for human occurrences, searched for natural causes, and based his conclusions on evidence. In this approach, he was influenced by the empiricism of the Hippocratic physicians. For Thucydides, a work of history, as distinguished from poetry, was a creation of the rational mind and not an expression of the poetic imagination. Thus, in Thucydides' *History of the Peloponnesian War* there was no place for legend, for myth, for the fabulous—all hindrances to historical truth. In the following passage, Thucydides describes his method of inquiry.

I began my history at the very outbreak of the war, in the belief that it was going to be a great war and more worth writing about than any of those which had taken place in the past. My belief was based on the fact that the two sides were at the very height of their power and preparedness, and I saw, too, that the rest of the

Hellenic [Greek] world was committed to one side or the other; even those who were not immediately engaged were deliberating on the courses which they were to take later. This was the greatest disturbance in the history of the Hellenes, affecting also a large part of the non-Hellenic world, and indeed, I might almost say,

the whole of mankind. For though I have found it impossible, because of its remoteness in time, to acquire a really precise knowledge of the distant past or even of the history preceding our own period, yet, after looking back into it as far as I can, all the evidence leads me to conclude that these periods were not great periods either in warfare or in anything else. . . .

In investigating past history, and in forming the conclusions which I have formed, it must be admitted that one cannot rely on every detail which has come down to us by way of tradition. People are inclined to accept all stories of ancient times in an uncritical way—even when these stories concern their own native countries. . . .

. . . Most people, in fact, will not take trouble in finding out the truth, but are much more inclined to accept the first story they hear.

However, I do not think that one will be far wrong in accepting the conclusions I have reached from the evidence which I have put forward. It is better evidence than that of the poets, who exaggerate the importance of their themes, or of the prose chroniclers, who are less interested in telling the truth than in catching the attention of their public, whose authorities cannot be checked, and whose subject-matter, owing to the passage of time, is mostly lost in the unreliable streams of mythology. We may claim instead to have used only the plainest evidence and to have reached conclusions which are reasonably accurate, considering that we have been dealing with ancient history. As for this present war, even though people are apt to think that the war in which they are fighting is the greatest of all wars and, when it is over, to relapse again into their admiration of the past,

nevertheless, if one looks at the facts themselves, one will see that this was the greatest war of all.

In this history I have made use of set speeches some of which were delivered just before and others during the war. I have found it difficult to remember the precise words used in the speeches which I listened to myself and my various informants have experienced the same difficulty; so my method has been, while keeping as closely as possible to the general sense of the words that were actually used, to make the speakers say what, in my opinion, was called for by each situation.

And with regard to my factual reporting of the events of the war I have made it a principle not to write down the first story that came my way, and not even to be guided by my own general impressions; either I was present myself at the events which I have described or else I heard of them from eye-witnesses whose reports I have checked with as much thoroughness as possible. Not that even so the truth was easy to discover: different eye-witnesses give different accounts of the same events, speaking out of partiality for one side or the other or else from imperfect memories. And it may well be that my history will seem less easy to read because of the absence in it of a romantic element. It will be enough for me, however, if these words of mine are judged useful by those who want to understand clearly the events which happened in the past and which (human nature being what it is) will, at some time or other and in much the same ways, be repeated in the future. My work is not a piece of writing designed to meet the taste of an immediate public, but was done to last for ever.

Critias

RELIGION AS A HUMAN INVENTION

After the Greek philosophers of Asia Minor began to employ natural, rather than supernatural, explanations for nature, Greek thinkers on the mainland applied reason to human affairs. Exemplifying this trend were the Sophists, who

wandered from city to city teaching rhetoric, grammar, poetry, mathematics, music, and gymnastics. The Sophists sought to develop their students' minds, and they created a secular curriculum—for these reasons they enriched the humanist tradition of the West.

The Sophist Critias (c. 480–403 B.C.) was a poet, philosopher, orator, and historian; also he was originally an eager follower of Socrates. Later, Critias became the most bloodthirsty of the so-called Thirty Tyrants, oligarchs who seized control of Athens in 404 B.C. and massacred their democratic opponents. The following passage, a surviving fragment of a play by Critias, demonstrates the Sophists' use of critical thought.

There was a time when the life of men was unordered, bestial and the slave of force, when there was no reward for the virtuous and no punishment for the wicked. Then, I think, men devised retributory laws, in order that Justice might be dictator and have arrogance as its slave, and if anyone sinned, he was punished. Then, when the laws forbade them to commit open crimes of violence, and they began to do them in secret, a wise and clever man invented fear (of the gods) for mortals, that there might be some means of frightening the wicked, even if they do anything or say or think it in secret. Hence he introduced the Divine (religion), saying that there is a God flourishing with immortal life, hearing and seeing with his mind, and thinking of everything and caring about these things, and having divine nature, who will hear everything said among mortals, and will be able to see all that is done. And even if

you plan anything evil in secret, you will not escape the gods in this; for they have surpassing intelligence. In saying these words, he introduced the pleasantest of teachings, covering up the truth with a false theory; and he said that the gods dwelt there where he could most frighten men by saying it, whence he knew that fears exist for mortals and rewards for the hard life: in the upper periphery, where they saw lightnings and heard the dread rumblings of thunder, and the starry-faced body of heaven, the beautiful embroidery of Time the skilled craftsman, whence come forth the bright mass of the sun, and the wet shower upon the earth. With such fears did he surround mankind, through which he well established the deity with his argument, and in a fitting place, and quenched lawlessness among men. . . . Thus, I think, for the first time did someone persuade mortals to believe in a race of deities.

REVIEW QUESTIONS

1. Hippocrates distinguishes between magic and medicine. Discuss this statement.
2. What were some of the methods that Thucydides promised to use to make his history more accurate and credible?
3. What was revolutionary about Critias' approach to religion?

4 Greek Art

The classical age of Greek art spans the years from the end of the Persian Wars (479 B.C.) to the death of Alexander the Great (323 B.C.). During this period, standards were established that would influence Western art until the present